C.D. Howe Institute
Commentary

ISSN 0824-8001

Leaving Well Enough Alone

Canada's Monetary Order in a Changing International Environment

David Laidler
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In this issue...

Calls for a common North American currency or for the Canadian dollar to be pegged to the US dollar should be rejected.

The Study in Brief...

Variability in exchange rates imposes costs on people and businesses who trade, lend, or borrow across national boundaries. This has led many economists to urge national monetary authorities to coordinate their activities with an eye to stabilizing international exchange rates or even to cede monetary policy to a supranational authority, as in Europe, and replace domestic currencies with a single unit of exchange. In the Canadian context, the call has been for a common North American currency unit or for Canada to adopt the US dollar as its currency and, in the run-up to currency union, to fix its exchange rate to the US dollar. This *Commentary* argues that such an approach would be misguided.

There is no interest in the United States in giving up the US dollar or sharing the US electorate's exclusive authority over monetary policy there, as a supranational currency or common-currency arrangement would require (to be attractive to Canada). The only common-currency arrangement available to Canada is the unilateral adoption of the US dollar.

Adopting the US dollar would require that Canada give up control over domestic monetary policy, eliminating the ability of the Bank of Canada to respond to external price changes or domestic monetary conditions. It would also limit the unique ability of Canada's monetary authorities to provide a secure cash backstop to the financial sector in the event of a systemic accident or failure of a major institution.

Pursuing a fixed exchange rate would likewise require the subordination of domestic monetary policy to the goal of maintaining that rate. Since this would neither allow smooth adjustment in the Canadian economy to external economic changes nor eliminate the transactions costs associated with international trade, it is not an attractive option: pegged rates deliver most of the costs of both a common currency and a floating exchange rate, and deliver the benefits of neither.

It would be costly for Canada to pursue membership in a yet-to-be-created multinational currency union, only to become stuck in an undesirable monetary halfway house. The only conclusion, therefore, is that since Canada is well served by the current monetary order — a floating exchange rate anchored by low-inflation targets, and macroeconomic policies that match the environment in which they operate — it would be wise to stick with these arrangements.

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$10.00; ISBN 0-88806-473-X

100-05192/

The pain caused by gyrating currencies and swift international capital flows has led many to seek a route to global financial stability through either more coordinated exchange-rate management or more fixity in international currency arrangements. This *Commentary* explains that, since the fixed-rate and common-currency arrangements available to Canada are likely to yield more costs than benefits, and since managed or pegged exchange rates represent unwholesome halfway houses en route to a common currency, it would be best for Canadian policy on monetary arrangements to stay roughly where it is now.

The international monetary environment seems to be perpetually in transit: currencies swing on and off metallic standards and in and out of multilateral exchange-rate agreements; they bounce within and without target bands. Currencies are sometimes fixed to others, but they come unstuck. And no matter what international monetary order has been in place, debate has raged over its sustainability, as has discussion about what any particular country should be doing about it.

A number of Canadian economists have recently argued that Canada should abandon its national currency and seek membership in a broader monetary system. Much of their case rests on the assertion that the monetary regime currently in place is functioning badly. This claim is, in fact, hard to support (see Laidler 1999). Yet even if the current monetary order is functioning well, it is perfectly reasonable to entertain the view that it could be inferior to available alternatives or, indeed, ultimately unsustainable in the face of a changing international environment. This *Commentary* takes on these matters.

Specifically, we address the question of whether growing economic integration among countries in general, and the possible evolution of multinational currency blocs in particular, make Canada's independently managed floating currency a relatively undesirable and unsustainable proposition. We conclude that there is nothing in the international environment that ineluctably leads to such a view.

It is true enough that there are economically viable options for a multinational monetary order in the Americas. One example would be a new regional common currency, overseen by a multinational central bank and supported by enough political infrastructure to ensure that its officials were held accountable to the electorates of the whole region. Whether such a monetary order would serve Canada better or worse than the one currently in place is, however, a matter about which reasonable people can and do disagree.

And there is one important sticking point, as we show below: such an arrangement is not in the political cards for the foreseeable future. The multinational monetary orders that are actually available involve either unilaterally adopting the US dollar as Canada's domestic currency, rigidly pegging the Canadian dollar to the US dollar by converting the Bank of Canada to a currency board, or adopting some less rigid form of fixed exchange rate. All of these carry economic and political disadvantages that render them distinctly inferior to the status quo.

The clear danger inherent in the current debate is that, were Canadians to become convinced that a fully fledged North American monetary union would be preferable to

The authors would like to thank for their helpful comments and thereafter absolve John Crow, Herb Grubel, Jack Mintz, John Murray, Bill Robson, and Bill Scarth, and thank Mark Kruger and Larry Schembri for permission to use data.

the status quo — a conclusion that should not be taken for granted[1] — they might set out to reach it, find it unattainable, and end up stuck in some unsatisfactory place halfway toward the original goal. Such an outcome could inflict serious long-term economic and political damage on Canada and would be costly to reverse. Hence we conclude that Canada should leave well enough alone when it comes to schemes for creating a multinational monetary system in the Americas, and concentrate instead on the less glamorous task of improving the performance of the current monetary order.

Choosing a Monetary Order

An open economy cannot have both a fixed exchange rate and a monetary policy geared to domestic goals.

An open economy cannot have both a fixed exchange rate and a monetary policy geared to domestic goals. The impact of trade in goods and services and the movement of capital will always either undermine the exchange rate or render monetary goals unattainable. The attempt to maintain both must always end in a shift in domestic monetary policy, a revaluation or float, or a domestic financial crisis — or some combination of all three (see Box 1 and Table 1).

From time to time, as when foreign-exchange and capital markets direct unwelcome attention to domestic policies, analysts seeking to escape the logical conflict argue for controls on international capital flows.[2] Cooler commentators have concluded, however, that free international movement of capital is so beneficial and the costs of controlling it are so great that the realistic choice — at least for an advanced economy with a mature and effectively regulated financial system — is giving up either a domestically oriented monetary policy or exchange-rate fixity.

But stated in this way, the choice is not well defined: governments must select an overall monetary order, not just its exchange-rate component.

The Exchange-Rate Regime and the Monetary Order

No reasonable analyst would want to defend the unstable macroeconomic policies pursued in Canada and elsewhere in the 1970s and 1980s, nor the exchange-rate fluctuations that accompanied them. If a flexible-rate regime always led to such outcomes, its advocates would be few and far between. But exchange-rate policy cannot be considered out of context with the broader monetary order in which it is expected to operate.

This order must include a supporting net of background policies. As the International Monetary Fund notes bluntly,

> [i]rrespective of regime, credible supporting policies (including an alternative nominal anchor for countries with floating exchange rates) and institutional arrangements are critical to success....Whatever exchange rate regime is adopted, its consistency with underlying macroeconomic policy is essential. (IMF 2000.)

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1 For more explanation of the case that the current regime is, in fact, better for Canada than any common-currency arrangement, see Murray (1999).

2 Recurring debates about the desirability of a "Tobin tax" on foreign-exchange transactions are a recent example of this. See Chandler and Laidler (1995) for a *C.D. Howe Institute Commentary* on this issue.

Given policy targets consciously chosen with an eye to domestic monetary stability, flexible-rate regimes became altogether more attractive.

In the course of the 1990s, flexible exchange rates became more often linked to policy targets consciously chosen with an eye to domestic monetary stability. In this context, flexible-rate regimes became altogether more attractive. Examples include the informal yet popularly understood low-inflation goals of the US Federal Reserve Board, the combination of self-imposed inflation targets and money-growth guidelines at the European Central Bank, and the quantified inflation-rate targets agreed on between governments and central banks in such countries as New Zealand, Australia, the United Kingdom, Sweden, Israel, Chile, Mexico, and, of course Canada — and also, more recently, Brazil and Poland.[3]

There are many possible configurations for a monetary order that encompasses currency union. It may involve a common currency with monetary policy overseen by a supranational central bank, as in the European model. It may be the outcome of one or more countries' adopting another's currency outright — or "official dollarization," as exemplified by Panama's use of the US dollar, recently emulated by Ecuador and perhaps in the cards for El Salvador.[4] Or it may involve the creation of currency boards based on some dominant national or supranational currency, which, to varying degrees, are the monetary arrangements of Argentina, Hong Kong, Singapore, and a number of eastern European and Baltic countries.[5]

Each of these variations carries with it advantages and disadvantages, both economic and political. The merits of membership in a specific common-currency arrangement can be assessed only with reference to a country's particular historical economic and political circumstances.

The Influence of Economic Structure and History

A country with a structure of production and trade patterns that render it vulnerable to frequent shifts in export or import prices will find a flexible exchange rate attractive, particularly if its domestic labor market is relatively inflexible. The relevance of these considerations to Canada's choice of exchange-rate regime is widely recognized (see Laidler 1999).

Meanwhile, a country with a history of domestic monetary instability has more to gain from joining a larger monetary system than does a country with a history of responsible domestic policy. The costs and benefits of any particular monetary order for one country also vary with the choices of countries with which it has close economic

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3 The newly floating Polish zloty is governed by an inflation target of 5.4 to 6.8 percent for 2000, but oddly the Polish central bank expects to miss that target. The ultimate goal is a stable currency that would be eligible for entry in the European Monetary Union — perhaps a backhanded compliment to the role of the float in matching exchange-rate levels to prevailing macroeconomic policies, and sending messages about those policies.

4 At the beginning of 1999, there were 12 officially dollarized economies: American Samoa, Guam, the Marshall Islands, Micronesia, the Northern Mariana Islands, Palau, Panama, Pitcairn Island, Puerto Rico, the Turks and Caicos Islands, and both the UK and US Virgin Islands, ranging in population from as many as 3.8 million in Puerto Rico to 42 on Pitcairn Island (United States 1999). Ecuador (population 12.6 million) implemented *dolarización* legislation in March 2000. By June, local banks were to effect all transactions in US dollars; bank machines were to be ready to dispense dollars in April.

5 Other countries with operational currency boards are Bosnia and Herzegovina, Bulgaria, Estonia, Lithuania, Brunei Darussalam, and Djibouti.

Box 1: *Monetary Unions, Flexible Exchange Rates, and Intermediate Arrangements*

The foreign-exchange market, like any other asset market, is inherently forward looking; changes in the expected future value of a currency affect current exchange rates. But a country's commitment to a monetary union or similar regime can provide a relatively secure anchor for its currency's nominal value. News about other events will affect it only to the extent that the news influences the credibility of that commitment — which is likely to be high if the commitment is embodied in domestic legislation or an international treaty.

At the other extreme, under a free float where there is no commitment to any particular value of the exchange rate, the rate moves immediately in response to new information. Since there is no political commitment to prevent the rate from moving, there can be no currency crisis when it does so.

In a regime between these two extremes, however, the responsible authorities (usually the government of the day) reserve the right to choose between holding the exchange rate steady or allowing it to change in the face of changing market expectations or balance-of-payments pressure. In principle, this flexibility enables them to act on a case-by-case basis in the best interest of the country. In practice, however, much narrower interests, such as promoting the political survival of the authorities in question, often come into play. Thus, market participants must judge any news affecting the market not only on the basis of its implications of news for the equilibrium value of the exchange rate, but also in terms of whether the authorities are likely to accept or resist a change in its value and, if the latter, with how much determination.

Since there is often little doubt about the direction in which a particular piece of news shifts the equilibrium exchange rate, the possibility of resistance on the part of the monetary authorities creates for market participants a one-way bet on the authorities' resolve to uphold their commitment to the going rate. If the authorities' credibility is not absolute or nearly so, the seeds of a currency crisis are sown. The more firmly the authorities resist the change in climate and the larger and less subject to friction are international capital flows, the more fertile is the ground on which these seeds of crisis might flourish.

This is why the 1990s saw a pronounced worldwide movement away from traditional pegged exchange rates among national currencies. During that unstable decade, flexible exchange rates proved viable for a number of countries, as did, at the other extreme, currency-board arrangements — in the European case, it was possible even to launch the successful first stage of a monetary union. But the 1990s also saw, even before the disasters of 1998, no fewer than 38 crises under fixed rates that ended in either devaluation or abandonment of the regime, as Osakwe and Schembri (1998) show (see Table 1).

ties. Argentina's recent history illustrates both points: relative to what went before, Argentina clearly has benefitted from the creation of a currency board based on US dollar reserves. But the advantages of that arrangement were also undermined when Brazil, Argentina's crucial export market, abandoned its crawling peg in early 1999, devalued, and adopted a regime of inflation targets plus a floating exchange rate. Hardship in Argentina followed as businesses suddenly found it much more cost effective to serve the Brazilian market from within Brazil, rather than exporting from Argentina.

Obviously, the pertinent factors in a country's choice of monetary regime are unlikely to remain constant over time — nothing is forever. Production and trade patterns evolve as technology and factor endowments change; irresponsible policymakers sometimes learn from their mistakes, and the apparently trustworthy

Table 1: ***Exchange-Rate Crises, 1990–97***

	Currency	Crisis Periods	Devaluation?/ Float?
Western Europe			
Finland	markka	November 1991; August, September 1992	yes/yes
Sweden	krona	December 1991; August, September, November 1992	yes/yes
Italy	lira	July, August, September 1992	no/yes
United Kingdom	pound sterling	August, September 1992	no/yes
Norway	krone	September, November, December 1992	yes/yes
Spain	peseta	September, November 1992; May, July 1993	no/yes
Portugal	escudo	September, November 1992; May, July 1993	no/yes
France	franc	September, November, December 1992; January, July 1993	no/yes
Greece	drachma	September 1992	no/yes
Ireland	punt	November, December 1992; January 1993	no/yes
Denmark	krone	November, December 1992; January, July 1993	no/no
Belgium	franc	February, March, July 1993	no/no
Latin America			
Mexico	peso	December 1994	yes/yes
Argentina	peso	1995:1Q	yes/no
Brazil	real	March 1995	yes/yes
East Asia			
Thailand	baht	May, July 1997	yes/yes
Philippines	peso	July 1997	yes/yes
Malaysia	ringgit	July 1997	no/yes
Indonesia	rupiah	July, August 1997	yes/yes
Hong Kong	dollar	October 1997	no/no
South Korea	won	October, November, December 1997	yes/yes

Source: Osakwe and Schembri 1998; reproduced with permission.

sometimes go haywire; and new monetary arrangements get adopted elsewhere in the world. Such changes as these can have important, even decisive, effects on the attractiveness of different monetary policy options.

There is, in short, no one right choice of exchange-rate regime for every country and for all time. One size does not fit all.

Toward Regional Currency Blocs: The Current International Scene

As international economic integration deepens, monetary arrangements are profoundly changing in Europe and Asia as well as in the Americas. Some commentators claim to foresee the emergence of an international monetary system based on three major currency blocs and are canvassing the idea of an international monetary order based on coordinating policy among the three or even on fixing the exchange rates among them.[6] The emergence of a world monetary order based on three dominant currencies would

6 See Bergsten et al. (1999). Mundell (2000) proposes an international monetary system based on fixed exchange rates among these three currencies, without awaiting the further development of regional blocs.

present smaller countries with the choice of either joining its local currency bloc or attempting to maintain such monetary independence as market forces would permit. The following discussion sets these regional choices in perspective.

Recent Regional Developments

In the past year or so, it has clearly become possible to talk of a "euro bloc" of countries, and to contemplate its further expansion. The European Monetary Union (EMU) is a *fait accompli*, and there is a possibility that Sweden, Denmark, and even the United Kingdom will join the fold in the near future. A number of eastern European and African currencies have created rigid links to the euro by way of fixes or currency-board arrangements.

Meanwhile, several countries in the Americas are debating creating monetary ties to the United States that conceivably could lead to some sort of "American Monetary Union" (AMU). Panama and Ecuador already use the US dollar as domestic currency, as noted above. The Argentine peso is rigidly linked to the US dollar through a quasi-currency board, and the possibility of full dollarization has been seriously considered there (although the idea apparently has been abandoned for the moment). There has also been discussion in other countries in the Americas — not least among the business community in Mexico — about closer monetary ties with the United States.

But if it is conceivable that a "dollar bloc" is emerging, it would be a bloc necessarily less well defined than its European counterpart, with even less certain prospects for expansion. Some relatively large economies, such as those of Mexico, Brazil, and Chile — not to mention Canada — for now remain inflation targeters with flexible exchange rates. These countries do not show any significant cultural inclination toward integrating politically, and without closer political ties a formal commitment to macroeconomic policy coordination would remain untenable.[7] There is no parallel in the Americas to the process of political integration that guided Europe's monetary union — one should not forget that the European project was founded on the aspirations of its leaders for a United States of Europe, aspirations evidently shared by a significant number of Europeans. Yet it is difficult to imagine, for example, the Italian public's desire to join the monetary union — seen as symbolic of Italy's full membership in the "European project" — having any counterpart among Canadians *vis-à-vis* an "American project."

There is no parallel in the Americas to the process of political integration that guided Europe's monetary union.

The Japanese yen is currently the dominant currency in Asia, but it seems unlikely that a "yen bloc" will emerge in the near future. China's currency is effectively fixed to the US dollar; Hong Kong has a US-dollar-based currency board; and South Korea, Indonesia, Singapore, and Thailand, all of which are substantial economies in their own right, are likely to continue floating their currencies alongside Japan's for the foreseeable future. (For a summary of exchange-rate regimes of major countries in the Asian basin, together with their economic weights, see Table 2). Furthermore, just as memories of World War II made it impossible to contemplate the deutschmark as a common European currency, popular sentiment would be likely to resist a pan-Asian

7 And it would be difficult to imagine that more traditional optimal-currency-area arguments could easily be extended to a monetary union stretching across the Americas (see Bayoumi and Eichengreen 1994).

Table 2: ***Exchange-Rate Regimes, Selected Asian and Australasian Countries***

	Gross Domestic Product	Exchange-Rate Regime
	(1997 US$ billions)	
China	918	peg
Malaysia	98	peg
Hong Kong	174	currency board
Subtotal fixed	*1,190*	
Singapore	96	managed float[a]
South Korea	443	float
Indonesia	215	float
Thailand	154	float
Australia	408	float (inflation targets)
New Zealand	65	float (inflation targets)
Japan	4,190	float
Subtotal floating	*5,571*	
Total GDP	6,761	

[a] Singapore is a special case. Since 1981, the Monetary Authority of Singapore has managed its exchange rate with reference to a basket of currencies and intervenes in capital markets to do so. Yet it pursues no pre-announced target; "low inflation" is its official policy. The Singapore dollar, on the other hand, is issued by the Board of Commissioners of Currency, Singapore (BCCS), which operated as a full-fledged currency board from independence in 1967 through to its announcement of a floating-rate policy in 1973. After 1973, the BCCS was required to maintain a stock of foreign assets equal to at least 100 percent of the issue of Singapore dollars; that requirement was lifted in 1982, and the BCCS ceased to meet any useful definition of a currency board.

Source: IMF 1999.

yen. And the supranational economic and political integration needed to support a new euro-like Asian currency are not in prospect.

An Asian currency bloc is simply not on the horizon, and there seems to be no immediate challenge to the monetary autonomy of such relatively small, advanced, and open economies as those of Australia and New Zealand, with which Canada's economy is often compared.[8]

To close the discussion with another quote from the IMF,

> The existing system of flexible exchange rates among the three major currencies (dollar, yen, and euro) is likely to continue to prevail. Other countries would, therefore, need to adapt to a global environment of exchange rate variability. (2000.)

On the Home Front

The US dollar is the most important international currency in Canada and elsewhere; the predominance of the United States in Canadian trade continues to grow, and the

8 However, fixing the dollar/yen exchange rate along lines suggested by Mundell (2000) would go some way toward creating an Asian currency bloc and change the policy tradeoffs those countries face. But whether that would change the tradeoffs Canada faces is a different question entirely.

Canadian and US manufacturing sectors are increasingly integrated.[9] These economic forces have much in common with those that were at work on the western European scene prior to the creation of the euro, and some commentators maintain that they make abandoning monetary independence economically attractive for Canada. The transactions costs and exchange-rate risks now associated with crossborder trade would be eliminated by the establishment of an integrated North American monetary system.

Some observers (for example, Grubel 1999) have suggested that such a system also would lead to a permanent reduction of interest rates in Canada, but we are skeptical of the extent of the benefits to be realized in this way. Nominal rates are already lower than in the United States, presumably as a result of Canada's increasingly credible low-inflation targets. The remaining rather small real rate differences probably reflect political and economic factors, such as differences in local credit market conditions, that monetary union by itself would do little or nothing to remove, any more than membership in the Canadian monetary union has equalized borrowing costs among the provinces.

A floating rate would continue to deliver benefits for Canada even in the event of greater coordination among regional blocs.

Moreover, one must not for a moment forget the capacity of a floating-rate arrangement to smooth the economy's adjustment to trade shocks — an advantage stressed in Laidler (1999) and Murray (1999), among others. This flexibility would continue to deliver benefits for Canada even in the event of greater coordination within or among regional blocs.[10]

Nonetheless, if the popularity of some sort of AMU option increases in Latin America, particularly in Mexico, it will strengthen the case of those who now advocate abandoning Canada's monetary independence. Indeed, it has been suggested that such abandonment is not only desirable but inevitable — that the main policy challenge Canada faces is to choose and then negotiate membership in as advantageous a version of a common-currency arrangement as possible (see Courchene and Harris 1999a).

The Status Quo as a Viable Option

The disappearance of Canada's monetary independence, shielded as it now is by a floating exchange rate, is not, however, an inevitability.

None of the usual economic factors that make abandoning domestic monetary autonomy attractive are now present in Canada nor have they been for a number of years. Canada's inflation-targeting regime was put in place at the beginning of the 1990s. At no small expense, it achieved credibility in the middle of the decade as inflationary expectations were significantly lowered, then stabilized within the target

9 It is self-evident, perhaps, but we should note that this trade has flourished — and without pronounced economic volatility — despite the lack of a fixed exchange rate in North America, disproving the assertion of some commentators that relatively free trade and floating exchange rates are somehow incompatible.

10 MacDonald and Marsh (1999) suggest, furthermore, that real exchange-rate stability may be greater in the case of three international currencies that are allowed to float against one another than in the case of bilateral management. If this is so, the further consolidation of the international monetary system into three currency blocs may not imply any increase in the likelihood of Canada's nominal exchange rate being subject to shocks originating in the system, even in the absence of effective policy coordination among those blocs. To keep Canada's float under those circumstances would preserve the ease of adjustment to those shocks that would still occur.

range. Public sector deficits were brought under control. The Canadian economy has since experienced continuing low inflation and its second-longest recorded peacetime real expansion. More recently (though this judgment is more tentative), it seems to have begun to function as it did in the years before the great inflation of the 1970s got under way (see Figure 1).

Critics of the current regime, however, claim that they are considering the future sustainability of the Canadian dollar (see, for example, Courchene and Harris 1999a). They argue that an uncoordinated drift toward using the US dollar is under way in the Canadian private sector, and that this drift is likely to produce domestic monetary instability as it develops into full informal dollarization of the economy. According to this view, it is preferable that Canada adopt, in a conscious and orderly fashion, some coherent monetary system based on the US dollar.

This stance is worth examining. How justified is the claim that Canada is headed inevitably toward dollarization?

Informal Dollarization in Canada

The degree of informal dollarization of an economy is hard to measure precisely, but recent years have seen examples of the process at work in a number of countries. The process can be measured approximately by tracking either the fraction of the domestic money supply denominated in US dollars or, more usually, the ratio of residents' foreign-currency deposits to the broad money supply (M2 or M3).[11]

The dollarization phenomenon is important in countries that have recently suffered gross monetary instability. It is hard, however, to give it nearly as much credence in the case of Canada. (See Figure 2, panel A, which shows data for dollarization in Canada, and panel B, which illustrates recent patterns in a number of unstable countries.) If we measure the degree of dollarization using data that include interbank holdings of foreign-currency deposits, the degree of dollarization in Canada now is roughly where it was in the 1970s, following a decline in the interim.

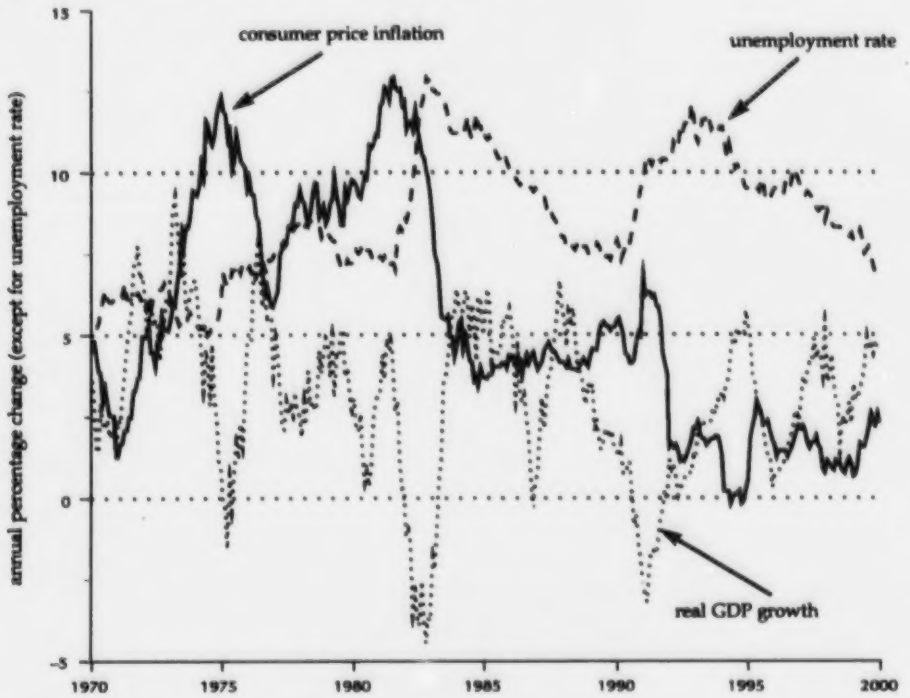
If we net out these deposits, which is possible only for the period since 1981, then the increase in dollarization in the 1990s is more conspicuous. Given the increasing integration of Canadian and US production processes over that period, however, this result is not in the least surprising. The US dollar is a widely used currency for transborder transactions, while the Canadian dollar is not; Canadians engaged in this trade are simply more likely to keep an increasing stock of US dollars on hand as its volume increases. Indeed, the volume of crossborder trade activity has increased spectacularly, as Figure 2 shows. Essentially all of the variation in foreign-currency holdings in Canada since 1981 is explained statistically by the level of those transactions.[12]

The US dollar is a widely used currency for transborder transactions, while the Canadian dollar is not.

11 Such a measure is far from ideal. It does not include, for example, residents' cash holdings or holdings of US-dollar-denominated accounts in balances outside of the country. If our aim was to measure the extent of capital flight (a common side effect of domestic monetary instability), the latter would clearly matter. But dollarization has to do with the extent to which a local currency is superseded in domestic circulation by US dollars, and for this purpose the omission may not be quite so central, particularly in Canada's case. Money balances to be used locally are likely to be held locally, unless the threat of their being confiscated is in the air.

12 An ordinary least-squares regression using Canadian–US trade on the current account to explain foreign-currency holdings for the 1981–99 period) has an R^2 of 0.95.

Figure 1: ***Selected Macroeconomic Indicators, Canada, 1970–2000***



Sources: C.D. Howe Institute; Statistics Canada.

Many Canadian companies, especially in the resources sector, borrow substantial amounts in US dollars. This is a wise precaution for companies that sell a significant fraction of their output in the United States or in other markets that use the US dollar. It is an informal type of hedging against exchange-rate risk for large exporters, as is the practice of having suppliers invoice them in US dollars. Senior employees of large corporations (and professional athletes and coaches) also sometimes receive substantial portions of their compensation in US dollars. Again, however, this move is a normal hedge for anyone whose career path might lead back and forth across the border or who might want to see palm trees on a regular basis during retirement.

Hedging exchange-rate risk is a normal activity in any open economy. So is the practice of agents in international transactions holding the means of exchange used in the relevant markets. Neither activity implies that the domestic economy is becoming dollarized.

In any event, the degree of dollarization in Canada verges on the trivial compared with that in some Latin American countries, as Figure 2 shows (or even in Russia, for that matter). In Argentina, for example, dollarization is deeply entrenched in the domestic economy, whether or not driven by international transactions.

On this evidence, therefore, it is hard to conclude that there is any immediate threat of the Canadian dollar's being abandoned — although the increase in foreign-currency holdings by nonbank agents resident in Canada is worth keeping an eye on.

Obviously, we cannot give any definitive predictions about what might happen in the future, but Box 2 highlights the factors on which outcomes might depend. A review of the relevant literature should provide considerable comfort to anyone worried that

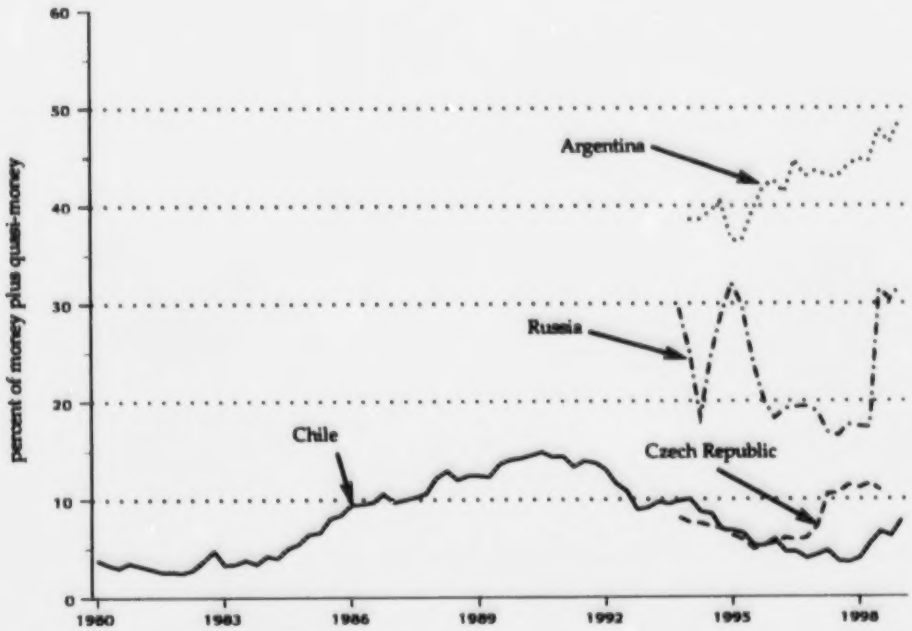
Figure 2: *Dollarization Indicators, Selected Countries*

A. Foreign Currency Deposits in Canada and Trade with the United States, 1970–2000

Note: Trade with the United States is the average of Canadian current-account receipts and payments *vis-à-vis* the United States.

Sources: C.D. Howe Institute; Statistics Canada, CANSIM database.

B. Foreign Currency Deposits as a Percentage of the Money Supply, Selected Countries, 1980–99



Sources: C.D. Howe Institute; IMF 1999; and IMF, special survey.

Box 2: *Network Externalities and Monetary Instability*

It is anything but straightforward for a market economy to shift from using one currency to another as the result of the uncoordinated and voluntary choices of individual agents. Indeed, as Issing (1999) argues, it was this very consideration that led the European Union, after a lengthy and thorough debate about the matter, to establish the euro by centralized decree rather than introducing it as a parallel currency that agents could voluntarily adopt on a piecemeal basis to replace their national currencies.

The main obstacle to such currency changeovers is a factor called "network externalities" (Dowd and Greenaway 1993) in monetary exchange. These are third-party effects that always lie in the background of money transactions among individuals. They arise from the fact that those who accept a particular money in exchange for some good or service do so because they are confident that when they come to make some purchase of their own, the vendor will accept it from them for the same reason.

As Dowd and Greenaway explain, network externalities ensure that, once a specific currency is established as the common means of exchange in a region, the costs associated with switching to an alternative can be high. Even if each party to every bilateral transaction would be just as happy to use some other currency, the common expectation among them that the already established currency would be easier to use in the next transaction can be enough to keep that currency in use. This tendency gathers further strength from the fact that many contracts specify a currency of payment, and revising them would entail added cost.

Furthermore, as Tavlas (1997) points out, legal restrictions imposed by government can reinforce network externalities. Such restrictions may state, for example, that only contracts set in local currency terms are legally enforceable, or that all local transactions must be consummated in the domestic currency. Even milder requirements can be influential: for example, it is usual for countries to require that taxes be paid in domestic currency; in an advanced economy, this restriction provides a powerful incentive for most agents to use it in any activities that give rise to tax liabilities.

Nevertheless, experience shows that network externalities, powerful though they are, do not always protect a currency from being supplanted to a significant extent by a foreign alternative if the former is sufficiently unstable in its purchasing power. This is because money is not only a means of exchange — the context in which network externalities are important — but also a unit of account and a way to store value. Any currency is vulnerable to replacement in its two other roles at the discretion of private agents if it begins to perform badly. Once it begins to be replaced in these other roles, its hold as a means of exchange can be weakened.

Canada will soon become the Argentina of the North. It stresses the importance of distinguishing between the use of money for specifically international transactions and for domestic purposes.[13] Meanwhile, the circumstances associated with widespread domestic dollarization elsewhere are not present in Canada. Moreover, it seems to take a great deal of monetary instability to undermine the domestic use of a national currency, because of legal restrictions and what economists call "network externalities" (see Box 2).

The implications for Canada's current policy options are straightforward. The continued domestic viability of the Canadian dollar will depend in large part on its remaining a currency of low and stable inflation. This fact places an important and desirable constraint on Canadian policymakers' ability to indulge in destabilizing

13 For a helpful discussion of this important distinction, see Tavlas (1997, especially 711–712).

Box 2 – continued

Consider money as a unit of account. In Latin America, for example, under conditions of high and unstable inflation such as Heymann and Leijonhufvud (1995) discuss, it has become common for the prices of high-value items, such as housing and large consumer durables, to be stated in US dollars. Such items take time to sell, and while they remain on the market, it is costly — and confusing to potential purchasers — for vendors to keep changing their advertised prices in terms of the local currency.

For similar reasons, contracts involving streams of payments over time, such as leases, tend also to become dollarized in inflationary conditions (although indexation is sometimes a viable alternative). The higher and more unstable the inflation rate, the more widespread such practices are likely to become.

Inflation also creates incentives for agents to shift their wealth to stores of value that are denominated in a stable unit. Where interest rates are free to adjust for inflation, the value of wealth denominated in units of a depreciating currency can be maintained. But high inflation rates are usually very variable, and it is costly — even prohibitively so — to be continuously adapting interest rates to current experience. Even indexation can break down if inflation becomes high and variable enough, simply because it takes time to calculate and publicize the price index's latest value. Moreover, tax codes seldom distinguish properly between the real and nominal components of taxable income.

Once dollarization takes hold of an unstable currency in these contexts, it can lose its status as a means of exchange. If leases are drawn up in dollars, why not use dollars to pay the rent? If sellers of expensive durable goods price them in dollars and hold the proceeds of their sales in dollars until they replenish their inventories, why not ask for or accept dollars for the actual transaction? Once under way, the process gains momentum as the same network externalities that applied to the local currency attach themselves to transacting in dollars.

What is surprising about the empirical evidence from high-inflation economies is not how far the process of dollarization goes under such circumstances, but how long substantial amounts of depreciating local currencies tend to stay in circulation despite all the incentives that exist to replace them. In Ecuador, for example, small shops and farms in outlying areas were so attached to the extant network of sucre exchange that they temporarily refused to accept dollars in payment for goods even as the central bank was buying sucres for dollars and burning the old currency. This kind of occurrence is testimony to the strength of network externalities and to the influence that legal restrictions, such as the requirement that taxes be paid in local currency, can exert.

policies. Should monetary or other policy undermine the domestic usefulness of the currency, Canadians will simply choose not to hold it, in effect neutralizing policy-makers' future choices.

Further, the modest legal restrictions on currency now in place in Canada — including the required use of the Canadian dollar as the unit of account and means of payment in the tax system — give extra support to its continued use.

All in all, the current extent of dollarization in Canada's domestic market is minor and it does not seem to be a serious threat for the future.

The Varieties of Common-Currency Arrangements

In this section, we discuss the possible forms an AMU might take. Each would have different economic and political implications for Canada.

A True AMU: A New Supranational System

A new supranational system is the model that proponents of Canada's giving up its monetary independence seem to have in mind as a best option. Under such a scheme, Canada and the United States — and perhaps Mexico, too — would cooperate to create a new monetary system, based on a new currency[14] which would replace the Canadian and US dollars (and, of course, the peso).

Under this setup, national central banks would cease to be independent policymaking bodies, although they might, as in Europe, continue to exist as local branches of a new supranational central bank, which would essentially be a variation on the current US Federal Reserve System. Some commonality among the regulatory frameworks of each domestic banking system would also be required, so that commercial banks, regardless of location, would have equal access to lender-of-last-resort facilities, and efficient crossborder links could be forged among national payments systems.

The new monetary system would eliminate exchange-rate risk (but not, of course, credit risk), as well as the transactions costs associated with crossborder transactions in both goods and capital — although, as we noted earlier, we doubt it would yield any great benefits to Canada in the form of lower interest rates. It would, however, certainly create a number of difficulties. In particular, no matter what its proponents might claim, the mere fact of its creation would be unlikely to eliminate the institutional labor market rigidities that make a floating exchange rate attractive for Canada. The Canadian economy is systematically exposed to real shocks emanating from international commodity markets, shocks that affect Canada differently from the United States.[15] The ability of labor to move freely within the AMU would certainly soften this objection, but it would also raise political issues far beyond the scope of this *Commentary*.

An AMU would be unlikely to eliminate the institutional labor market rigidities that make a floating exchange rate attractive for Canada.

In any case, the notion of an AMU raises a set of unresolved political questions: Who would appoint the officers of the new central bank? Who would set their goals and hold the bank officers accountable for achieving them? Who would design and enforce the common elements in the regulatory framework? How would existing local regulations be harmonized with these common elements? Would the lender-of-last-resort function be administered on a union-wide basis or delegated to national banks that formed part of some federated system? Who would represent the union on monetary discussions in international forums? Last but not least, if the system turned out not to work well and a return to a system of national currencies seemed desirable, by what mechanism might this be accomplished?

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14 Grubel (1999) suggests calling it the "amero."

15 This matter is discussed at much greater length in Laidler (1999). We are well aware of theoretical arguments alleging eventual better outcomes in this regard following a monetary union, since labor market institutions presumably would tend to adapt in the long run to monetary arrangements that have credibility and permanence. This is essentially a Lucas critique of models that imply advantages for floating-rate regimes. The difficulty here lies in understanding the substantive implications of this insight, which depend on what exactly is meant by "the long-run," "credibility," and "permanence." No doubt the EU's experience with a common currency will provide some help here, but the examples of France and Italy (and perhaps Belgium) in implementing the EU's working-time directive by legislating a 35-hour work week does not bode well for those counting on increasing labor market flexibility.

This is quite a list, and it is worth recalling that, even though the euro is in place, the EU still has not resolved all of them.[16] This is despite the fact that, long before the euro was launched, a substantial EU-wide set of political institutions existed, providing a well-tried political infrastructure within which these often-difficult issues could be negotiated; moreover, the new currency was seen from the outset as an important step in a continuing project of political integration.

No parallel political institutions are in place in the Americas, nor are any seriously contemplated. This fact has serious implications for the prospects of replacing the US dollar with an amero. Germans had good political reasons to be willing to see the euro replace the deutschmark, but there seem to be none that would convince Americans to abandon their dollar. (See Box 3 for a discussion of a fuller range of political and institutional obstacles to an amero.) Thus, should an AMU come about, it would involve extending the use of the US dollar, not replacing it.

In the absence of an AMU, then, Canada could follow the Panamanian or Ecuadoran example and unilaterally adopt the US dollar as its currency. To this option we now turn.

Formal Dollarization: Economic Aspects

Canada's adopting the US dollar as its currency would involve redenominating all Canadian dollar contracts in US dollars at an exchange rate close to that prevailing in the time just prior to the changeover and replacing the stock of Canadian dollars with an equivalent stock of US dollars. The US dollars would be obtained partly from Ottawa's existing holdings of foreign-exchange reserves and partly by selling US-dollar-denominated federal debt on international markets.

The United States could not prevent dollarization in Canada.

Undertaken in this way, formal dollarization would be instituted by a unilateral decision on the part of Canada. The United States could not prevent its happening, and all that would be required to implement it would be Canadians' willingness to live thereafter with the ensuing constraints on policy and local democracy. The US government could, however, influence the nature of those constraints, depending on the degree of cooperation it was willing to offer its northen neighbor.

We do not, in fact, have to speculate on what such cooperation might entail, because the US government has already made it quite clear that there are strict limits on how far it is willing to go in support of any foreign government that chooses dollarization. In April 1999, in a statement to the US Senate Banking Committee's Subcommittees on Economic Policy and Foreign Trade and Finance, then Deputy Secretary of the Treasury Lawrence H. Summers observed:

> [T]here are certain limits on the steps that the United States would be prepared to take in the context of [another country's decision to dollarize]. Specifically, it would not, in our judgement, be appropriate for the United States authorities to extend the net of bank supervision, to provide access to the Federal Reserve discount window,

16 In particular, the Maastricht Treaty is ambiguous about the division of authority between the European Central Bank and the EU Council when it comes to international aspects of monetary policy (see Laidler and Poschmann 1998). Further, the configuration of the European System of Central Banks leaves it unclear just where, among the European and national central banks, the responsibility and necessary powers for exercising the lender-of-last-resort function resides (see Blanchard et. al. 1998, appendix).

Box 3: *Institutional Questions Surrounding an "Amero"*

The size of the United States relative to other countries in the Americas, whether measured by gross domestic product or by population, leads to political inertia that makes it unlikely that the kind of political infrastructure needed to support a supranational monetary authority, even one that used the dollar rather than some new currency, could be created in the foreseeable future.

Courchene and Harris (1999b) suggest that the 12 district banks of the Federal Reserve System could indeed form the basis of US participation in a multinational central bank, within which the Bank of Canada and perhaps also the Bank of Mexico would have a status equal to one of the district banks. But these district banks are privately owned — by the member banks of their districts. And US monetary policy is made not by a committee of the presidents of those district banks but by the Federal Open Market Committee (FOMC), on which a revolving subgroup of these presidents is in a permanent minority. It is the governors of the Federal Reserve System, appointed by the US president (subject to congressional approval), who make up the majority of the FOMC and, through Congress, are accountable to the electorate for the conduct of monetary policy. That is why the Board of Governors, in its description of the Fed's "purposes and functions," characterizes it not as "independent of government" but "independent within government" (Board of Governors of the Federal Reserve System 1987).

Courchene and Harris suggest, in effect, that a supranational central bank be created by abolishing the very institutions whereby US voters now exercise influence over monetary policy — institutions that, furthermore, are an integral part of the US federal government, while leaving parallel institutions in Canada and Mexico in existence. They do not explain why the US electorate should support so radical a diminution of its authority over the monetary policy to which it is subject — indeed, the prospect of Americans' acquiescing in such a change seems incredible.

A framework within which the central banks of Canada and other countries became district banks of the Fed would also be fraught with political difficulties for the countries that joined the system. They would have to accept the regulatory powers over the financial system that US law currently gives to the Fed, and bring their domestic regimes into rough harmony with that of the United States.* They would have also to live with an FOMC in which US government appointees held a permanent majority in making monetary policy — something it is hard to believe that Canadians, let alone the more nationalist voters of potential Latin American participants in an AMU, would accept.

On the other hand, to give the populations of other American countries meaningful power over the decisionmaking process of an extended Federal Reserve System would require the US electorate to relinquish the exclusive influence over its own affairs that it now takes for granted. In our judgment, a multinational monetary system of the Americas that required such a concession on the part of the US electorate is a practical impossibility.**

* In the United States, regulatory authority at the federal level is shared between the Federal Reserve Board and the Comptroller of the Currency, an office of the US Treasury Department. In Canada, the Bank of Canada has no formal regulatory authority; such authority lies mainly in the hands of the Superintendent of Financial Institutions. To make the Bank of Canada a district bank of the Fed would, therefore, require overhauling the Canadian regulatory framework.

** Grubel (1999) is more optimistic than we are on this score. He clearly believes that there is enough of a chance that the US electorate would be willing to make significant concessions of sovereignty over monetary policy for the matter to be worth pursuing.

> or to adjust bank supervisory responsibilities or the procedures or orientation of US monetary policy in light of another country deciding to adopt the dollar. (Summers 1999.)

Although it was made in the context of discussions of dollarization in Argentina, Summers' observation is quite general and clearly defines the constraints under which any dollarizing country would have to operate in the absence of a major change in the United States' policy stance.

Unilateral dollarization would also dramatically alter the capacity of Canadian institutions to carry out their traditional roles in the monetary system. To begin with, since the Bank of Canada would be unable either to create or to extinguish US dollars, an independent Canadian monetary policy would be impossible. Canadian interest rates would simply take whatever values markets believed to be appropriate in the light of US monetary policy, which, in turn, would continue to be conducted via the Federal Reserve System.

The enormous success of US monetary policy ought not lead us to believe that it would always be congenial to Canada.

The enormous success of US monetary policy in the 1990s ought not lead us to believe that it would always be congenial to Canada or that no potential loss for Canada would result from its handing over monetary policymaking to the Fed. Formal dollarization would involve the Canadian electorate's abandoning the capacity to use domestic political channels to change monetary measures that affected it adversely. The Canadian monetary authorities would remain free to regulate and supervise the domestic financial system, and a separate Canadian payments system could continue to exist. But that system could not continue to operate as it does now. Its members would need to hold clearing balances of some generally acceptable US-dollar-denominated asset. The most likely choice would be US-dollar liabilities of the Bank of Canada, but because the Bank would be unable to create those, balances would have to be backed by the Bank's holdings of some asset such as US treasury bills.

The Bank of Canada would no longer be able routinely to create the funds it needed for day-to-day overdraft facilities for members of the payments system, and its workings would have to be changed to reflect this constraint. A rediscount mechanism, presumably involving US treasury bills, might be needed for institutions temporarily short of clearing balances, and members of the clearing system would find it wise to hold secondary reserves of these assets as well as clearing balances. In short, it is hard to see how Canadian chartered banks could be easily integrated in a crossborder clearing system. One outcome might be their reduced ability to stay cost competitive with US institutions in the provision of financial services.

The Bank of Canada's inability to create US dollars would also limit its capacity to act as lender of last resort to the financial system. It could hold reserves of US dollars, or arrange lines of credit in the United States and elsewhere, but it could not continue to offer, as it now does, the implicit guarantee of acting at any time on whatever scale it thinks necessary to ensure the stability of the domestic financial system. Nor could it continue to act as the ultimate guarantor of deposit insurance. This does not mean that alternative means of providing for, and underwriting, deposit insurance would be unavailable or necessarily undesirable, but devising and implementing them would add yet another cost to the policy upheaval.

As far as domestic transactions are concerned, dollarization would force the Canadian payments system to regress to a more cumbersome *modus operandi* than that

now in place. Dollarization's limits on the Bank of Canada's role as lender of last resort would render the system more fragile in times of crisis and increase the day-to-day costs of some usual aspects of financial intermediation.

Formal Dollarization: Political Aspects

Formal dollarization's broader political implications are also disturbing. One possible view is that adopting the US dollar would simply amount to Canada's contracting out a particular function of government — namely, the making of monetary policy — to a foreign supplier of the service who is particularly skilled at providing it. This analogy is, however, profoundly misleading.

When a city or provincial government contracts with an outside agency to perform some function — say, policing — it retains the option of readily withdrawing the contract or altering its terms if the agency fails to deliver services that meet the needs of the local electorate. This gives voters important leverage over the execution of policy — just as Canadian voters now retain ultimate authority over monetary policy even though its implementation is delegated to a Crown corporation, the Bank of Canada.

If Canada were to dollarize voluntarily, US monetary policy would continue to be made in the best interests of the US electorate, with no obligation to take Canadian interests into account. Canadian politicians have no standing to comment on US monetary policy, and Canadian voters have no one to speak on their behalf in the US Congress.

Dollarization, therefore, would not simply be a matter of delegating the design and implementation of Canadian monetary policy to foreign experts who would nevertheless be accountable to the Canadian electorate. Instead, it would involve accepting the consequences for Canada of whatever monetary measures US experts thought best for the United States. The relationship it would create between the two governments in the monetary sphere would not be contractual but quasi-colonial.[17]

Political friction would not create problems for Canada alone.

The obvious potential for political friction implicit here would not create problems for Canada alone. This matter was at the top of a list of worries Summers outlined in a 1998 speech. After noting the conceivable economic benefits of dollarization, he said "there would be the opposing risk that in difficult times, the loss of domestic monetary sovereignty would foster resentment and encourage policy makers to deflect blame for problems onto the United States" (Summer 1998).

A Currency Board: Generic Model

The archetypical colonial monetary arrangement is a currency board, an arrangement that has been suggested as the backbone of a North American monetary system. A

17 Thus, it is also misleading to argue, by analogy with international trade agreements, that limitations on national sovereignty are simply a fact of economic and political life in the twenty-first century and that formal dollarization would therefore be no different from membership in the World Trade Organization. The WTO is the outcome of an agreement among sovereign countries to accept limits on their freedom to set trade policy as well as the rulings of an international tribunal in the event of a dispute. It does not involve handing over an important economic policy function to the government of another country.

Canadian monetary system based on a generic version of a currency board would differ from full dollarization only in that local notes, bearing local symbols, would circulate instead of (or alongside) US dollars. This would have two rather minor consequences relative to the full dollarization alternative.

First, under a currency board, the US-dollar assets backing the domestic currency would bear interest. Seigniorage revenue would therefore accrue to the Bank of Canada and the Royal Canadian Mint, rather than to the US Treasury Department as would be the case under dollarization.[18]

Second, some advocates of an AMU seem to find the maintenance of local symbolism on the currency an important consideration. But it is hard to understand why the symbolic value of maintaining an image of the Queen on the $20 bill (rather than, say, Andrew Jackson) would be more important to Canadians than the monetary sovereignty forgone under an AMU.

Other Currency-Board Models

It would be easy enough to depart from the generic currency-board model in a way that left the Bank of Canada with some room to maneuver on domestic monetary policy. Specifically, instead of all of its liabilities being backed by US assets, the Bank could back a certain quantity of them, a "fiduciary issue," with domestic securities — probably, but not necessarily, Canadian federal government liabilities. This fiduciary issue might also be made variable, within limits, at the discretion of the Bank. The current Argentine monetary regime has both these features.

The second item — the ability to vary the extent to which Bank of Canada liabilities would be backed by domestic securities — is particularly worth considering, because it would give the Bank some autonomy in providing liquidity to the domestic banking system. This power could be used in emergencies, when a lender of last resort was required, as well as in more ordinary situations to undertake a limited range of independent policy actions aimed at influencing the domestic economy.

How far such actions could be carried would depend on the limits to the size of the fiduciary issue. At one extreme, a fixed fiduciary issue would transfer some seigniorage from the Bank of Canada to the federal government without creating any scope for policy activism. At the other extreme, with no limits at all on the fiduciary issue, the policy regime would cease to resemble a currency board and become in effect a fixed-exchange-rate regime, albeit one in which the rate was perhaps enshrined in law rather than adjustable at the discretion of the minister of finance.

With no limits on the fiduciary issue, the currency board would become in effect a fixed-exchange-rate regime.

Herein lies the both the critical advantage and the critical disadvantage of a modified currency board relative to full dollarization. A currency board could be configured to mitigate the quasi-colonial status implicit in full dollarization, leaving open useful opportunities for independent domestic action. At the same time, however,

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18 It is conceivable that, if Canada implemented formal dollarization, the United States would make a free gift of an initial stock currency to Canada, thus transferring seigniorage income. The US Congress's 1999 Joint Economic Committee report discussed a variety of seigniorage-sharing arrangements and seemed quite accommodating toward such an arrangement in principle (see United States 1999). Summers (1998), moreover, does not rule out the possibility of collaborating on seigniorage with dollarizing countries. Seigniorage is an important source of revenue in some Latin American countries but not in Canada, however, so we pay relatively little attention to it in this *Commentary*.

misuse of the powers of fiduciary issue could well undermine a currency board's viability. And because a currency board would issue a distinct national currency, its existence would make it that much easier for a government to re-establish domestic monetary independence should it so desire; a currency board would offer an exit strategy that neither a currency union nor full dollarization would have readily available.

A currency board would offer an exit strategy that neither a currency union nor full dollarization would have readily available.

A currency board arrangement, therefore, could never be quite as credible as full dollarization. That is why, at times of international financial crisis, currency boards can come under extreme speculative pressure, as happened in both Hong Kong and Argentina in recent years.[19]

Argentina's recent experience in this regard is not encouraging. The monetary regime's credibility there depends on severe constraints on the central bank's ability to create liabilities unsupported by its stock of US dollar reserves, as well as on an exchange rate that is fixed by law. Moreover, even though the Argentine monetary regime had already survived considerable pressure during the so-called Tequila Crisis of 1994–95, it came under severe strain again during the international financial crisis of 1998. In September of that year, a 400-basis-point spread opened up between peso- and US-dollar-denominated short-term loans, a sure sign that financial markets had grave doubts about the system's durability. The system survived, but only at the cost of imposing monetary conditions on the Argentine economy tight enough to produce a severe recession, from which the country is only now emerging.[20]

For Canada, the lesson is that a currency board might bring more credibility than a run-of-the-mill fix, but international lending in Canada would still bear an exchange premium to the unavoidable extent that the board lacked complete credibility, although the premium might be smaller than it would be under other regimes.[21] Furthermore, this imperfect credibility would leave open the possibility of speculative attack and crisis, as discussed in Box 1.

Summary of Common-Currency Options

Canada's prospects of becoming a member of a wider monetary system may be summarized as follows.

A fully fledged AMU, based on a new currency and overseen by a new supranational central bank, would have economic attractions for Canada. Foreign-exchange risk, conversion costs, and crossborder clearing costs would all vanish. Depending on the details, such an arrangement could also have the great political

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19 Grubel (2000) also cites this evidence as casting doubt on the credibility of currency board arrangements. The experience led to Argentina's canvassing full dollarization as a serious policy alternative.

20 Although the currency board has been in place for nine years, Argentina's domestic labor market remains riddled with rigidities. Argentina's highly regulated economic arrangements, like those in Europe, do not bode well for those hoping that rigid exchange rates will swiftly force flexibility elsewhere in the economy.

21 McCallum (2000) raises a different issue, but one that would lead to higher interest rates. If the rationale for a currency board was the presumed inefficiency in Canadian manufacturing permitted by a depreciating currency, the requisite cure — an appreciating currency — would mean higher interest rates during some lengthy adjustment period.

advantage of preserving a degree of accountability on the part of the monetary authorities to the Canadian electorate. Creating a monetary union could be a major step toward forming a loose multinational federation of American states and might also usefully involve the creation of a common labor market. Membership in such an organization would involve Canada's surrendering a degree of national sovereignty to the authorities of that federation, but such would be the case for all its members. Economic and political nationalists would find this loss of sovereignty objectionable, to be sure, but economic and political liberals ought not to object to it as a matter of abstract principle.[22]

The overwhelming drawback to a fully fledged AMU is that the option simply is not available.

The one overwhelming drawback to a fully fledged AMU is that the option simply is not available — there is no sign that US voters have the slightest interest in it nor is there any reason they might develop such an interest in the foreseeable future. Hence, in our judgment, it is not a serious policy option for Canada, and we believe that the burden of proof in this case must lie with those who believe the contrary.

If Canada really does want to be absorbed into a broader monetary system, only two real alternatives are available: a unilateral move to dollarization and the creation of some variant of a currency board. Neither option, however, would bring the economic gains that monetary union would yield — indeed, from the point of view of the efficiency of the domestic payments system, their effects would be regressive. Dollarization, moreover, would require Canadian voters to surrender their ability to hold those in charge of Canadian monetary policy accountable for their activities.

A currency board could be reconfigured to mitigate the last of these problems by providing for some variable fiduciary component in the liabilities of the Bank of Canada. Such an arrangement would confer on the Bank scope for monetary policy action, but it would also move the system away from a pure currency board and toward a fixed-exchange-rate regime. The more significant the scope for policy such a modification created, the larger the move toward a simple fix this would be and the less credible the currency board would become. The result would be an arrangement with all the costs of maintaining a separate currency, but few of the benefits of an independent monetary policy. Moreover, owing to the possibility of an expanding fiduciary issue, it would also retain the economic costs associated with currency (devaluation) risk, again without the offsetting benefits that would attach to a float.

The Other Alternatives

For reasons we explained earlier, the monetary status quo remains viable for Canada, and we believe some of its critics have overstated the prospect of the domestic economy's dollarizing of its own accord. On the other hand, the possible common-currency options are either unrealistic or extremely unattractive. If Canadians want to consider seriously an alternative to the status quo, then by default it would have to be some variety of fixed-exchange-rate regime. Let us review the possibilities.

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22 This does not mean that there are not important issues for political liberals when it comes to the design of such an arrangement. We, for example, would have strong objections to an AMU central bank that was as little accountable to the electorate as the European Central Bank appears to be.

A Pegged Exchange Rate

The simplest form of fixed-exchange-rate regime is a traditional exchange-rate peg. The *Bank of Canada Act* makes it quite clear that the power to fix the exchange rate lies with the government of the day, and that the Bank always acts as the government's agent in the foreign-exchange market. No legislation would be needed to establish such a regime, then — simply an announcement by the government that the pursuit of medium-term inflation targets as the overriding goal of monetary policy would henceforth be superseded by the maintenance of the Canadian-dollar price of the US dollar within some narrow range.

Any regime set up by decree by politicians can be amended or abolished by the same means and, therefore, can have no more credibility than the politicians who instituted it.

As we saw above, however, recent history has not been kind to such arrangements elsewhere in the world, and for good reason. Any regime set up by decree by politicians can be amended or abolished by the same means and, therefore, can have no more credibility than the politicians who instituted it.

More specific to the Canadian case, so long as Canada remains an exporter and the United States an importer of primary commodities, the real exchange rate between the two countries will be subject to price shocks in that volatile market. When world commodity prices fall, domestic monetary conditions must be tightened if downward pressure on the Canadian dollar's nominal exchange rate on the US dollar is to be resisted. In the absence of a much greater degree of money wage and price flexibility than currently exists, this tightening will have potentially adverse consequences for real income and employment.

This argument is not merely a matter of speculation. In 1997–98, the fall in commodity prices associated with the Asian crisis did indeed drive down the Canadian exchange rate, while domestic monetary policy remained focused on domestic inflation targets. The economy continued to expand, inflation remained low, and — critical in the Canadian case — the fiscal balance at both the provincial and federal levels remained healthy. Had the declining exchange rate been resisted by monetary policy, it is hard to see how a recession, and an accompanying fiscal setback, could have been avoided.

If the dollar is pegged without an accompanying radical overhaul of labor market institutions, then sooner or later Canadian politicians will face the prospect of inflicting hardship on the electorate in order to support the exchange rate. The less credible is the initial political commitment to the exchange rate, the higher those costs will be. It is hard to avoid the conclusion that there is a vicious circle inherent in this arrangement that would make a pegged Canadian exchange rate extremely fragile and hard to defend. (A clear description of the vicious circle appears in Berg et. al. 2000, 39–40.) As Mundell has remarked, "The combination of pegged or pseudofixed exchange rates with an independent monetary policy is no doubt the worst of all exchange-rate systems" (Mundell 2000).

A Rate Fixed by Law

The credibility of a fixed rate can be improved by girding the regime with something more robust than a political commitment. In the Canadian case, this could be accomplished by legislation. An amendment to the *Bank of Canada Act* that required the Bank to maintain a specific US-dollar value for the Canadian dollar would be easy

enough to draft, and would attach an additional degree of credibility to a fixed exchange rate.[23]

Such legislation would move the Bank of Canada some distance toward a currency board. But unless it were also accompanied by measures that specified US-dollar backing for some or all of the Bank's liabilities, the Bank would still have room to grant short-term overdrafts to the clearing system. This would make preserving an efficient payments system feasible, and provide some measure of lender-of-last-resort cover to the financial system — two features generally unavailable under a currency board.

The interesting question is just how much extra credibility such an arrangement would have relative to a merely pegged rate. After all, government could as easily suspend the legislation or, under pressure, vary its implementation, as happened in Hong Kong. And there remains the question of how feasible the requisite overhaul of labor market practices would be; in either case, the ability of monetary authorities to resist market pressure on the dollar would hardly be absolute.

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On these points, it would do to reflect on the experience of Argentina discussed above. Now, Canada is not Argentina, and a legislatively fixed Canadian exchange rate would start out with more credibility than did the Argentine one; at the first sign of trouble, however, markets would test it. It took five or six years to establish the credibility of inflation targets in Canada in the early 1990s; it is hard to see why it would be any easier to gain credibility for a fixed exchange rate a decade later. And since it is doubtful that Canadian labor markets could be made significantly more flexible in advance of such a plan, establishing credibility for the exchange-rate regime would be a painful process.

Market Dollarization under a Fixed Rate

There is another consideration. As we noted, a prime reason for opening up discussion of Canada's exchange-rate regime has been the fear that monetary independence is even now being eaten away piecemeal by market dollarization.

Under current arrangements, this fear is exaggerated. Under a fixed exchange rate, however, it would have more weight, since network externalities do less to keep a national currency in use under a fixed rate than under a flexible one. Under a flexible rate, when the Canadian dollar comes under pressure its price falls, eliminating any prospective gains for ordinary domestic vendors who are inclined to accept, and then hold, US dollars in lieu of Canadian dollars. Under a fixed rate, those prospective gains would remain in view, and the incentives for vendors to ask for payment in US dollars would increase.

The process of domestic market dollarization is well under way in Argentina under its currency board arrangement (see Figure 2, panel B). Although this *de facto* dollarization is less frequently discussed than the international credibility of Argentina's current arrangements, it is another important reason for that country's interest in formal dollarization. Under a formal arrangement, Argentina might at least

23 Purists might argue that such an obligation is implicit in the current preamble to the *Bank of Canada Act*, which states that the Bank of Canada is to control and protect the external value of the currency. However, a preamble has no legal force — it is purely interpretative. What we have in mind here is for an explicitly quantitative value for the exchange rate to be written into the body of the act.

negotiate some arrangement with the United States to have a role in its own monetary system. But if market dollarization became essentially complete of its own accord, Argentina would have no such role, and a less than fully credible currency-board regime would merely hasten Argentina's loss of monetary policy soveregnty.

Market dollarization under a fixed exchange rate could, of course, be limited by restrictions on the domestic use of the US dollar. But it is hard to see how restrictions would be effective in the absence of exchange controls — and yet exchange controls would be entirely inappropriate if the main purpose of having a fixed rate in the first place was to lower the cost of crossborder transactions.

Conclusions

The international monetary system has seen some profound changes in the past decade or so, but two hard realities nonetheless remain. First, the current regime is a long way from converging on three currency blocs that could form the basis of a coordinated world monetary system. Second, any kind of monetary union in the Americas that would require the United States to relinquish exclusive control over its monetary policy is politically unattainable.

We readily concede, nevertheless, that schemes for worldwide or even regional monetary unions have great attractions in the abstract, particularly compared to the complicated realities of the currently fragmented monetary status quo. As the foregoing discussion surely made clear, however, there are many way stations along the road toward a monetary El Dorado that are a great deal worse than the status quo — in which, given the mythical nature of the ultimate destination, it would be all too easy for the unwary traveler to become permanently trapped.

The threat of significant market dollarization is remote.

In Canada, the threat of significant market dollarization of the domestic monetary system is remote under the current flexible-exchange-rate arrangement as long as policy remains stable, as it has been since the mid-1990s. The current regime is viable and functions rather well, while the practicable alternatives — as opposed to those about which academics might speculate — look distinctly inferior. Common-currency arrangements that might be politically feasible, such as dollarization or a currency board, do not offer an attractive combination of benefits for Canadians.

Any fixed-exchange-rate regime closer than these to a traditional peg would suffer from the usual credibility and stability problems inherent in imposing such an arrangement on an economy with far-from-perfect labor markets and a real exchange rate that is subject to price shocks in international commodity markets. Moreover, to replace a flexible exchange rate with a less than fully credible fixed exchange rate would increase the likelihood that significant market (as opposed to official policy) dollarization will take hold in the domestic monetary system.

Rather than devoting scarce resources to promoting alternative monetary systems that are either unattainable or unattractive, it would probably be wiser for Canadians to pay attention to the mundane but more useful task of making the current system work better.

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